Work Order April-22-13 1:15:)0419		*10	N419*						Page	1
Revision ID:	04000-9		/	Accept	*N900	04 0	100)* s	Setup Star Stop	IVI	S1* S2*	•
	/22/13	Start Qty: 4. Req'd Qty: 4.	7	\$.04	Cust Item I Customer:	D:				I		
Approvals:	Process Pl	an: <u>μ</u> しゴ	Date: 13-04-	23 Tooling:	Da	ite:		F	Run Star	17	R1*	
				-	Da	ate:			Stop	*N	R2*	
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
Draw Nbr	Re	vision Nbr										
D4000	Α											
100				0.00								
100								11	\mathcal{O}			.,
Hardinge CNC Lathe S	Small	DWG	ON AS PER DWG AND FOLIC REV: A DWG AND FOLIC OREV: A JA	0.00 D FA910	13-4-23	,						
110		QC2- Inspect parts	s off machine FAI/FAIB	0.00	<i>,</i>				\int			
110 QC Quality Control		Memo	o	0.00 SM	13-4-25	,	-	<u> </u>	_0_			-
120		QC8- Inspect parts	s - second check	0.00	n/							
120 QC Quality Control		Mem	0	0.00	1 13-04-25			11	Ø			-

NCR: Y	es / No				WORK ORDER NON-C	ON	IFOR!	MANCE / UPI	DATE			
		1								QA Closed:	Date:	
Work Orde	er:	:			DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	i	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
		· ·		Dogge	ption of work order update		nitial	Act	tion	Sign &		
Root Cause	Date	Step	Qty		or Non-conformance		ef Eng		ription	Date	Verification	QC Inspector
Doc/Data		<u> </u>										
Equip/Tooling	<u> </u>											
Operator		,										
Material												
Setup												
Other		1								ļ		
Process		i										
Supplier												
Training		•			,	1						
Unapproved						<u> </u>		<u></u>				
						AUL'	CATE	GORY				
Landi	ng Gear	:		_	General	$\overline{}$				1		7
	Bending	:			Bend	-	Grain			Ovalized		Pressure/Forced
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	Cracks			<u> </u>	Broken/Damaged	-		ion Incomplete	–	Part Incorred	⊢	Weld
	Crushed/	'Crimped		<u> </u>	Burrs	_		ions Incomplete/I	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
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	Heat Tre		- 1	<u> </u>	Countersink	\vdash	Mislabe		<u> </u>	Positioned V		Other
	Inspection		lube	- -	Cut Too Short	-	Misread	ג		Power Loss/	ourge	Tottlei
	Ripples in		F	_	Drill Holes	\vdash	Offset	Calibratia -			10.0	<u> </u>
	Torque V			ⁿ	Drawing	\vdash		Calibration				
	Turning 9	equence	•	1	Finish	1 1	Out of S	Sequence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

April-22-13 1:	15:45 PM			. 1()(14 19"							1 age 2	
Item ID: Revision ID:	D4000-9			Accept	*N900	<u>040</u>	100)* s	etup	Start	*N	S1*	
Item Name:	Grommet									Stop	*N	S2*	
Start Date:	4/22/13	Start Qty: 4.00	*4*	,	Cust Item 1	D:							
Required Date	: 5/03/13	Req'd Qty: 4.00	*4*		Customer:								
Reference:				•		•					•		
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ate:	-	R	lun	Start	*N	R1*	
	QC:		Date:	SPC (Y/N):	Da	ate:				Stop	*N	R2*	
Sequence ID/ Work Center I	D	Operation Description	,	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Oty		Reject Number	Insp. Stamp	
130		Identify as per dwg & St	ock Location:	0.00	•			/		1.			
120 Packaging Packaging		Memo	waw3	0.00					(3)	7/2 8	<u>?</u>	(!/_	
140		QC21- Final Inspection	· Work Order Release	0.00	,					12	<i>[-</i>]	/ 4	_
140 QC Quality Control		Memo		0.00						17/	19/4	ME C	J
Quality Control				:				•				MF (-)	9

										DQA:	Date	e:
NCR: Y	es / No	•			WORK ORDER NON-C	CON	VFOR	MANCE / UP	DATE			
		. :								QA Closed:	Date	e:
Work Orde	ar.				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
	lo.				Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality
raiti					Use-as-is	1		noforming	Finishing	⊣	re/Packaging	Other
NCR N	No	·			Work Order Update			Large Fab	Composite] (180,510	Supplier	
Root		<u> </u>		Descri	ption of work order update		nitial	Ac	tion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data												
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Landir	ng Gear			٠	General		1			7	r	
	Bendin			ļ	Bend	\vdash	Grain		<u></u>	Ovalized	-	Pressure/Forced
	_	Not Conce	ntric to	o/s _	BOM/Route	\vdash	Hardwa		_	Over/Under		Temperature/Cure
	Cracks			<u> </u>	Broken/Damaged		1	ion Incomplete	_	Part Incorre	<u> </u>	Weld
	⊢	d/Crimped		<u> </u>	Burrs		•	ions Incomplete/	'Unclear	Part Lost/M	ssing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte		<u> </u>	Part Moved		
	Heat Ti				Countersink		Mislabe		<u> </u>	Positioned V	· ·	-
	—	ion Strip ir	Tube	_	Cut Too Short		Misread	1		Power Loss/	Surge	Other
	├ ── ``	in Bend			Drill Holes		Offset					
	Torque	Waves in	Extrusio	n L	Drawing		Out of 0	Calibration				<u></u>

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Finish

Folio

April-22-13 1:15:44 PM

Work Order ID:

100419

Parent Item:

D4000-9

Parent Item Name:

Grommet

.

Start Date: 4/22/13

Required Date: 5/03/13

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP REV:A NEW ISSUE 10-02-05 JLM VERIFIED BY:EC

IPP rev B 10.05.13 ecn10-

562 EC verified by:DD

	562 EC verified	i by:DD												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
MDELRINR1.2500 DELRIN ROUND BAR 1.	25"	Purchased	No			100	f	14.5000	0.05	0.2105264	2		3-4-25	,

 Location
 Loc Oty
 Loc Code

 MAT018
 14.5

 125251
 14.5

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											DQA:	Dat	e:
NCR: Y	⁄es	/ No				WORK ORDER NON-C	100	NFORM	MANCE / UP	PDATE			
									*		QA Closed:	Dat	e:
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part N	- No					Rework Scrap Use-as-is		Thern	Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	No	.		,		Work Order Update			Large Fab	Composite	j	Supplier	
Root	Т				Descri	ption of work order update		nitial	Ad	ction	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data			:										
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Operator	Ш							:					
Material	Ш						1						
Setup	Щ												·
Other	Ш												
Process .	Ш		*				İ						
Supplier	Ш		í										
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Unapproved			<u> </u>	<u> </u>							<u> </u>		
	,,						AUL	T CATE	GORY				
Landi					_	General		la .			Jo . 15 1	Г	Pressure/Forced
	${m H}$	Bending				Bend	-	Grain		-	Ovalized Over/Under	<u> </u>	Temperature/Cure
·	—	Centre No	ot Concei	ntric to	^{0/S} -	BOM/Route	\vdash	Hardwa		<u> </u>	-1	 	Weld
	ш	Cracks	o :		-	Broken/Damaged	-	4	ion Incomplete	// to along	Part Incorre	<u>}</u>	Wrong Stock Pulled
	\vdash	Crushed/	Crimped		-	Burrs	-	4	ions Incomplete,	Onclear	Part Moved	22111B [
	-	Cuffs			-	Countains	\vdash	Mainte		-	4	Vrong	
	-	Heat Trea		T l	<u> </u>	Countersink	\vdash	Mislabe		<u> </u>	Positioned V Power Loss/		Other
	-	Inspectio		iube	<u> </u>	Cut Too Short Drill Holes	\vdash	Misread Offset	ı	L	Trower ross/	onige [Torrier
	${m o}$	Ripples in			_	-	\vdash	4	Calibration				
	1 1	Torque W	raves in E	Extrusio	n	Drawing		JOUT OF C	Calibration				

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	100419
Description: Grommet	Part Number:	D4000-9
Inspection Dwg: D4000 Rev: A		Page 1 of 1

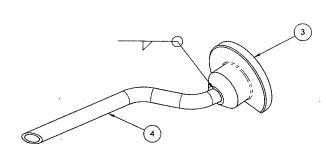
FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.60	+/-0.030	554			F)-9	U015
Ø1.02	+/-0.030	1.02				00/ 5
0.39	+/-0.030	.392				. (
Ø0.709	+/-0.010	.706				
Ø0.748	+/-0.010	749				
0.051	+/-0.010	-050				
0.073	+/-0.010	-071			()	/
0.20	+/-0.030	.202		_	/	
0.13 x 45°	+/-0.030 x 0.5°	-13x 45°			2000	
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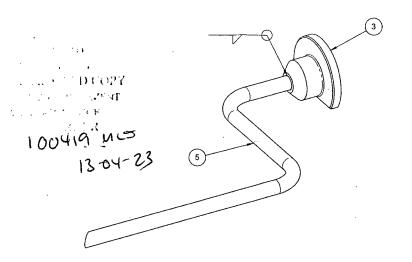
Measured by:	Audited by:	St	Preliminary Approval:	N/A
Date: 13-4-25	Date:	13-04-25	Date:	N/A

Rev	Date	Change	Revised	diby	,	Approved
Α	10.08.03	New Issue		\mathcal{M}		1)
			****	1) / [

ITEM	QTY. -043	QTY. -045	P/N	DESCRIPTION	JOHN CAMERON AVIATION PART NUMBER
1	X	1	D4000-041	DRAIN FITTING ASSEMBLY, AFT	JCA-M47-1-06
2		X	D4000-043	DRAIN FITTING ASSEMBLY, FWD	JCA-M47-1-15
		<u> </u>			
3	11	1	D4000-3	FUEL SUMP DRAIN FITTING	
4 -	11		D4003-1	INTERNAL DRAIN LINE, AFT	
5		1	D4003-3	INTERNAL DRAIN LINE, FWD	



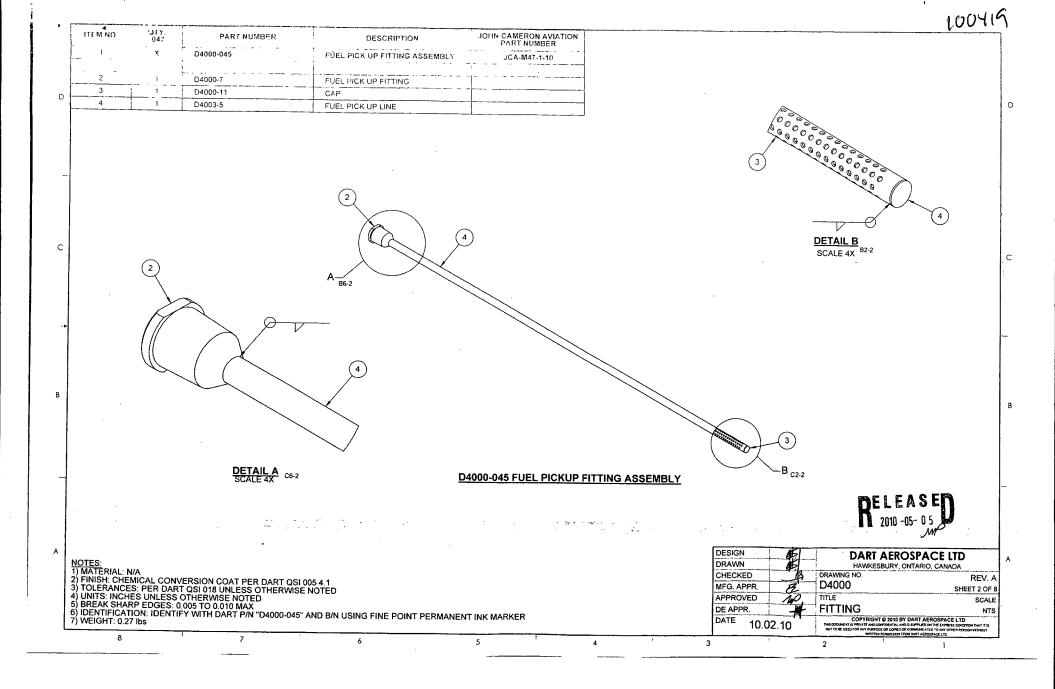
D4000-041 DRAIN FITTING ASSEMBLY, AFT

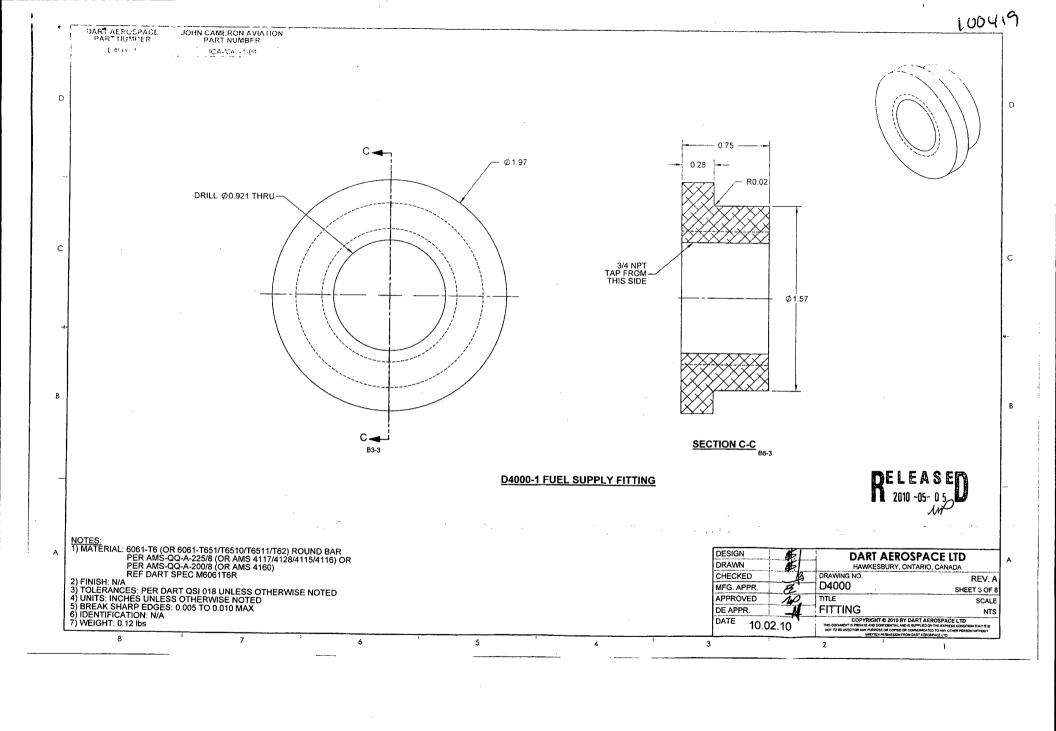


D4000-043 DRAIN FITTING ASSEMBLY, FWD

, A	NEW ISS	UE		1	10.02.10
REV.			DESCRIPTION	BY	DATE
DESIGN DRAWN			DART AEROSI HAWKESBURY, ONTA		_
CHECK MFG. A		居	DRAWING NO. D4000	V ST	REV. A
APPRO		19	FITTING		SCALE NTS
DATE	10.03		COPYRIGHT © 2010 BY DAR		

NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4000-043/-045" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: D4000-043 - 0.04 lbs
D4000-045 - 0.05 lbs

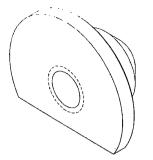


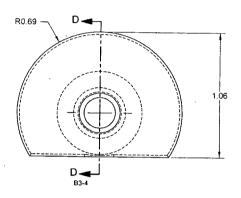


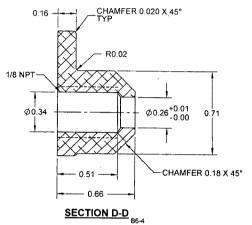
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DART AEROSPACE PART NUMBER JOHN CAMERON AVIATION
PART NUMBER Dane YOA M47 1 05

D







D4000-3 FUEL SUMP DRAIN FITTING

NOTES: 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS4160) REF DART SPEC M6061T6R 2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.03 lbs

DESIGN DRAWN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	B	DRAWING NO.	REV. A
MFG. APPR.	E	D4000	SHEET 4 OF 8
APPROVED	10.	TITLE	· SCALE
DE APPR.	-	FITTING	NTS
DATE 10.02.10		COPYRIGHT (9) 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVE THE DOCUMENT OF SUPPLIES OF THE CAPITAL SCHOOL HALT IS NOT TO BE USED FOR MY PURPOSE ON COMED HIS COMMENCED ALL THE THE PRISH WHITCHES AND MY THE PRISH WHITCHES AND MET REPORCES. IT TO	

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DART AEROSPACE PART NUMBER JOHN CAMERON AVIATION PART NUMBER

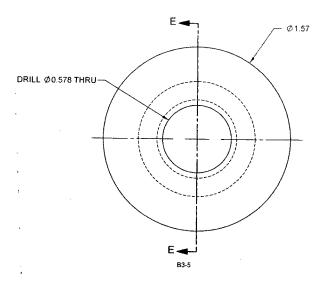
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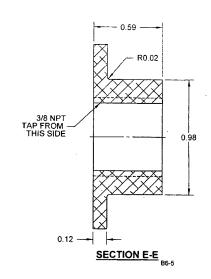
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С

В

JCA M47-E09





D4000-5 FUEL TANK VENT FITTING

NOTES: 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) ROUND BAR PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) REF DART SPEC M6061T6R

2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.04 lbs

ESIGN		DART AEROSPACE LTD		
DRAWN	A S	HAWKESBURY, ONTARIO, CANADA		
CHECKED	B	DRAWING NO.	REV. A	
MFG. APPR.	8	D4000	SHEET 5 OF 8	
APPROVED	10.	TITLE	SCALE	
DE APPR.	1	FITTING	NTS	
DATE 10.02.10		COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENTS FRANTE AND COMPONITION HAS BY SUPPLED ON THE EXPRESS CONDITION THAT IT IS		

